Application No. 10/684.837

## REMARKS

Claims 1-3, 8-12, 19-21, 25-31 and 61-62 are pending in this application. For purposes of expedition, claims 1, 2, 10-12, 20, 26 and 28-31 have been amended in several particulars for purposes of clarity and brevity that are unrelated to patentability and prior art rejections, while claims 61-62 have been newly added in accordance with current Office policy, to alternatively define Applicants' disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

Claims 1 and 12 have been rejected under 35 U.S.C. §112, 2d ¶, as being indefinite for reasons that the word "effected" should be replaced with --affected--. In response thereto, claims 1 and 12, as well as claim 20 have been amended to overcome the rejection.

Claims 1-3, 8-10, 12, 19, 25, 27 and 28 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Osakabe, U.S. Patent No. 5,872,763 (Osakabe '763) in view of Shoji et al., WO 02/11131; U.S. Publication No. 2004/0022166 (Shoji '166) and further in view of Shoji et al., U.S. Patent No. 6,157,609 (Shoji '609) for reasons stated on pages 2-6 of the Office Action. In support of the rejection of base claims 1 and 12, the Examiner asserts that Osakabe '763 discloses most features as claimed, except: (1) recording a test write pattern in a plurality of tracks; wherein the quality of the reproduced radio frequency signal is effected by writing in adjacent tracks, which the Examiner alleges as being disclosed or suggested by Shoji '166 (paragraph 103-105 of Shoji '166); and (2) wherein write pattern elements of the write pattern are optimized using at least one of a magnitude, an asymmetry value, and a jitter value of the radio frequency signal, which the Examiner alleges as being disclosed or suggested by Shoji '609 (col. 2, lines 49-55; and column 19, 19-30). However, the Examiner's assertions are incorrect. Applicants respectfully request the Examiner to reconsider and withdraw this rejection for the following reasons.

First of all, base claims 1 and 12 define methods of optimizing recording on an optical recording medium to determine optimum powers, including optimum write, erase and bias powers (Pw, Pe, Pbw), as shown, for example, in FIG. 9, and optimum write pattern elements of a write pattern, as shown, for example, in FIG. 10.

For example, base claims 1 and 12 define, inter alia:

setting <u>standard powers</u>, including <u>write</u>, <u>erase and bias powers</u>, for test recording and recording a test write pattern in a plurality of tracks of the optical recording medium; and

checking a quality of a radio frequency signal reproduced from one of the plurality of tracks in which the test write pattern is recorded and which is affected by writing in adjacent tracks to <u>determine optimum powers</u>, including optimum write, erase and bias powers for optimized recording conditions.

wherein <u>write pattern elements of the write pattern are optimized</u> using at least one of a magnitude, an asymmetry value, and a jitter value of the radio frequency signal, so as to generate a <u>write pattern having optimum write pattern elements used for data recording</u> on the optical recording medium.

As defined in Applicants' base claims 1 and 12, optimum recording conditions, including powers and write pattern elements of a write pattern, are automatically realized, despite of occurrences of cross-erase caused during writing or cross-talk caused during reproduction.

In contrast to Applicants' base claims 1 and 12, Osakabe '763, as a primary reference, does not disclose what the Examiner alleges. Osakabe '763 only discloses a recording technique, as shown in FIG. 1, in which test recording signals are recorded on an optical disc by changing the intensity values of the erasing power, the bottom power and the writing power in order to determine a combination of optimum intensity values of the writing power and erasing power, of the writing power and bottom power. However, much of varying of intensity values of these powers is not based on Applicants' claimed "recording a test write pattern in a plurality of tracks of the optical recording medium" and "determining optimum powers, including optimum write, erase and bias powers, using a radio frequency signal reproduced from one of the plurality of tracks effected by writing in adjacent tracks", as defined in Applicants' base claims 1 and 12.

Specifically, Osakabe '763 describes on column 5, lines 5-30, as cited by the Examiner, that.

"when the test recording mode is instructed, the control section 50 controls the recording signal switching section 20 to connect to the test-recording signal generating section 16 so that test-recording signals 18 are output therefrom, and the control section 50 also controls the recording/reproducing section 22 to record the test-recording signals 18 are predetermined area of the optical disc 28 while varying the intensity values of the writing power and erasing power, of the writing power and bottom power, or of the writing power erasing power and bottom power, and bottom power, or of the writing power erasing to the recorded test-recording signals 18 are reproduced so that the recording-quality-representing parameter detecting section 36 detects an asymmetry value, modulation factor or error rate of the signals, and then the optimum power determining section 38 determines a combination of optimum intensity values of the writing power and bottom power, or the

writing power, erasing power and bottom power."

However, there is **no** disclosure from Osakabe '763 nor is there any teaching or suggestion of the Applicants' claimed "recording and recording a test write pattern in a plurality of tracks of the optical recording medium" and "determining optimum <u>powers, including optimum write, erase and bias powers,</u> using a <u>magnitude of a radio frequency signal</u> reproduced from one of the plurality of tracks effected by writing in adjacent tracks" as generally defined in Applicants' base claims 1 and 12.

As secondary references, neither Shoji '166 nor Shoji '609 discloses or suggests features the Examiner alleges. For example, Shoji '609 does **not** disclose Applicants' claimed "write pattern elements of the write pattern [are] optimized using at least one of a magnitude, an asymmetry value, and a jitter value of the radio frequency signal, so as to generate a write pattern having optimum write pattern elements used for data recording on the optical recording medium" as defined in Applicants' base claims 1 and 12.

In view of these reasons and deficiencies of the Examiner's proposed combination, there is no reason for one skilled in the art to incorporate teachings of Shoji '166 and Shoji '609 into a recording device of Osakabe '763 in order to arrive at Applicants' base claims 1 and 12 and its dependent claims. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

Claims 11 and 29-31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Osakabe, U.S. Patent No. 5,872,763 in view of Shoji et al., WO 02/11131; U.S. Publication No. 2004/0022166 and further in view of Shoji et al., U.S. Patent No. 6,157,609 and further in view of Furumiya, U.S. Patent No. 6,791,926 for reasons stated on pages 6-9 of the Office Action

Claims 20 and 21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Osakabe, U.S. Patent No. 5,872,763 in view of Shoji et al., WO 02/11131; U.S. Publication No. 2004/0022166 and further in view of Shoji et al., U.S. Patent No. 6,157,609 and further in view of Ohara et al., U.S. Patent No. 5,140,580. Lastly, claim 26 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Osakabe, U.S. Patent No. 5,872,763 in view of Shoji et al., WO 02/11131; U.S. Publication No. 2004/0022166 and further in view of Ohara et al., U.S. Patent No. 5,140,580 and further in view of Tsukamoto, U.S. Publication No. 2002/0141316 for

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reasons stated on pages 9-10 of the Office Action. Since these rejections are predicated upon the correctness of the rejection of Applicants' base claims 1 and 12, Applicants respectfully request the Examiner to reconsider and withdraw this rejection for the same reasons discussed.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC office at (202) 216-9505 ext. 232.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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